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10/812,560	03/30/2004	Lex Olorenshaw	50T5730.01/1699	3694

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EXAMINER	
JACKSON, JAKIEDA R	

ART UNIT	PAPER NUMBER
2626	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/812,560	OLORENSHAW ET AL.	
	Examiner	Art Unit	
	Jakieda R. Jackson	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 19 and 39 are objected to because of the following informalities:

- Regarding claims 19 and 39, the phrase "depending one whether", should be -- depending on whether--.

Appropriate correction is required.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1, 4, 6-7, 11, 21, 24, 26-27, 31 and 41** are rejected under 35 U.S.C. 102(e) as being anticipated by Cooley et al. (PGPUB 2005/0149336), hereinafter referenced as Cooley.

Regarding **claims 1, 21 and 41**, Cooley discloses a system, method and computer-readable medium, hereinafter referenced as a system, for indexing electronic information, comprising:

an authoring module that coordinates an authoring procedure for creating an index file that includes pattern word sets corresponding to data objects (voice input associated with an image; column 1, paragraph 0012) stored in a memory device (figure 2, element 204), said pattern word sets being generated with a speech recognition engine that transforms (translates) spoken data descriptions (voice input) into text data descriptions (to text), said pattern word sets being associated with data object identifiers that identify said data objects (image; column 1, paragraphs 0012 and 0016-0017); and

a retrieval module that manages a retrieval procedure in which said speech recognition engine converts a spoken data request into a text data request (translates voice input to text), said retrieval module comparing said text data request and said pattern word sets to identify a requested object identifier for locating a requested data object from among said data objects stored in said memory device (once voice data has been translated to text, the text can be presented with the image on a display; column 1, paragraphs 0012 and 0016-0017).

Regarding **claims 4 and 24**, Cooley discloses a system wherein said data objects include stored images created by an imaging device (image; column 1, paragraph 0016), said stored images being saved in said memory device of a host electronic device (figure 2, element 204).

Regarding **claims 6 and 26**, Cooley discloses a system wherein said authoring module displays thumbnail representations of said stored images on a display of said host electronic device to facilitate said authoring procedure (thumbnail; column 1, paragraph 15, columns 1-2, paragraph 0017 and column 4, paragraph 0033).

Regarding **claims 7 and 27**, Cooley discloses a system wherein a selected image is chosen from thumbnail representations of said stored images for creating a corresponding one of said pattern word sets, said selected image being chosen by a system user after viewing said thumbnail representations on an indexing graphical user interface (thumbnail presented on display; column 1, paragraph 15, columns 1-2, paragraph 0017 and column 4, paragraph 0033).

Regarding **claims 11 and 31**, Cooley discloses a system wherein said authoring module edits said text data descriptions on an indexing graphical user interface according to editing instructions from a system user to produce said pattern word sets, said editing instructions including a change-word instruction, a delete-word instruction, and an add-word instruction (modify, delete and add; column 4, paragraph 0036).

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1-5, 8, 10, 12-14, 16, 20-25, 28, 30, 32-34, 36, 40-47** are rejected under 35 U.S.C. 102(b) as being anticipated by Greene, Jr. et al. (USPN 6,377,925), hereinafter referenced as Greene.

Regarding **claims 1, 21 and 41**, Greene discloses a system, method and computer-readable medium, hereinafter referenced as a system, for indexing electronic information, comprising:

an authoring module that coordinates an authoring procedure for creating an index file that includes pattern word sets corresponding to data objects stored in a memory device, said pattern word sets being generated with a speech recognition engine (each word of text stored in database; column 5, lines 35-39) that transforms spoken data descriptions into text data descriptions (receive speech inputs from microphone and converts speech into text; column 4, line 65 – column 5, line 5), said pattern word sets being associated with data object identifiers that identify said data objects (column 6, lines 1-11); and

a retrieval module that manages a retrieval procedure in which said speech recognition engine converts a spoken data request into a text data request (receive speech inputs from microphone and converts speech into text; column 4, line 65 – column 5, line 5), said retrieval module comparing said text data request and said pattern word sets to identify a requested object identifier for locating a requested data object from among said data objects stored in said memory device (column 6, lines 1-11 with column 5, lines 24-30).

Regarding **claims 2 and 22**, Greene discloses a system wherein said pattern word sets each include one or more search terms derived from said text data descriptions, said search terms including one or more key words that relate to said data objects (search for word; column 7, lines 59-66 with column 8, lines 45-60).

Regarding **claims 3 and 23**, Greene discloses a system wherein an indexing graphical user interface is utilized to create said pattern word sets, said indexing graphical user interface including an object section for displaying representations of said data objects (images are displayed on the monitor; column 5, lines 2-6), said indexing graphical user interface also including an editing section for converting said text data descriptions into said pattern word sets (column 5, lines 44-52).

Regarding **claims 4 and 24**, Greene discloses a system wherein said data objects include stored images created by an imaging device (column 5, lines 2-6), said stored images being saved in said memory device of a host electronic device (figure 1, element 53).

Regarding **claims 5 and 25**, Greene discloses a system wherein said authoring module instructs said host electronic device to enter an authoring mode for performing said authoring procedure in response to a verbal authoring-mode command that is recognized by said speech recognition engine (command; column 8, lines 2-30).

Regarding **claims 8 and 28**, Greene discloses a system wherein said spoken data description is provided by a system user speaking into a sound sensor (figure 1, element 32 with column 7, lines 6-29 and column 8, lines 2-9) of said host electronic

device, said spoken data description including a verbal description of a selected image from said stored images ("the cow jumped over the moon"; column 5, lines 44-52).

Regarding **claims 10 and 30**, Greene discloses a system wherein said authoring module displays said text data descriptions on an editing section of an indexing graphical user interface for editing into said pattern word sets (edited through keyboard; column 6, lines 18-20).

Regarding **claims 12 and 32**, Greene discloses a system wherein said authoring module stores each of said pattern word sets along with a corresponding one of said data object identifiers into said index file for subsequently performing said retrieval procedure (column 6, lines 1-11 with column 5, lines 24-42).

Regarding **claims 13 and 33**, Greene discloses a system wherein said retrieval module instructs said host electronic device to enter a retrieval mode for performing said retrieval procedure in response to a verbal retrieval-mode command that is recognized by said speech recognition engine (column 7, line 61 – column 8, line 45 with column 9, lines 4-18).

Regarding **claims 14 and 34**, Greene discloses a system wherein said spoken data request is provided by a system user speaking into a sound sensor of said host electronic device (column 7, lines 6-28 and column 8, lines 2-9), said spoken data request including a verbal request related to a selected image from said stored images (column 6, lines 1-11).

Regarding **claims 16 and 36**, Greene discloses a system wherein said retrieval module accesses said index file for performing a search procedure that identifies said

requested data object by seeking search matches between said text data request and said pattern word sets (comparing text and accessing clip; column 5, lines 24-43).

Regarding **claims 20 and 40**, Greene discloses a system wherein said retrieval module displays said requested data object on a display of said host electronic device after said retrieval procedure has been performed (retrieve word then display; column 8, lines 17-22 with column 7, lines 59-62).

Regarding **claim 42**, it is interpreted and rejected for the same reasons as set forth in claims 1, 21 and 41.

Regarding **claim 43**, Greene discloses a system for indexing electronic information, comprising:

an authoring module that coordinates an authoring procedure for creating an index file that includes pattern word sets corresponding to images (column 5, lines 2-3) stored in a memory device (figure 1, element 53), said pattern word sets being generated with a speech recognition engine that transforms spoken data descriptions into text data descriptions (receive speech imputes from microphone and converts the speech into text; column 4, line 65 – column 5, line 5) that are edited upon an indexing graphical user interface (edit through keyboard; column 6, lines 18-20) for creating said pattern word sets, said pattern word sets being associated with image identifiers that identify said images (column 5, lines 2-3 with column 6, lines 1-11); and

a retrieval module that manages a retrieval procedure in which said speech recognition engine converts a spoken data request into a text data request receive speech imputes from microphone and converts the speech into text; column 4, line 65 –

column 5, line 5), said retrieval module accessing said index file for comparing said text data request and said pattern word sets to identify a requested image identifier for locating a requested image from among said images stored in said memory device (figure 1, element 53).

Regarding **claim 44**, Greene discloses a system for indexing electronic information, comprising:

an authoring module that creates an index file that includes pattern word sets corresponding to data objects (column 5, lines 44-52);

a speech recognition engine that converts a spoken data request into a text data request (converts speech to text; column 5, lines 2-5 with column 6, lines 1 –11); and

a retrieval module that compares said text data request and said pattern word sets to locate a requested data object (column 5, lines 24-52).

Regarding **claim 45**, Greene discloses a system for indexing electronic information, comprising:

an authoring module that coordinates an authoring procedure for creating an index file that includes pattern word sets corresponding to data objects stored in a memory device (figure 1, element 53), said pattern word sets being generated with a speech recognition engine that transforms spoken data descriptions into text data descriptions for creating said pattern word sets (converts speech to text; column 5, lines 2-5 with column 6, lines 1 –11), said pattern word sets being associated with data object identifiers that identify said data objects (column 5, lines 24-52).

Regarding **claim 46**, Greene discloses a system for indexing electronic information, comprising: a retrieval module that manages a retrieval procedure in which a speech recognition engine converts a spoken data request into a text data request (converts speech to text; column 5, lines 2-5 with column 6, lines 1 –11), said retrieval module comparing said text data request and said pattern word sets to identify a requested object identifier for locating a requested data object from among data objects stored in a memory device (figure 1, element 53 with column 5, lines 24-52 and column 6, lines 1-11).

Regarding **claim 47**, Greene discloses an electronic indexing system implemented by:

creating an index file that includes pattern word sets corresponding to data objects (column 6, lines 1-11), said pattern word sets being generated with a speech recognition engine that transforms spoken data descriptions into text data descriptions for creating said pattern word sets converts speech to text; column 5, lines 2-5 with column 6, lines 1 –11);

utilizing said speech recognition engine to automatically convert a spoken data request into a text data request converts speech to text; column 5, lines 2-5 with column 6, lines 1 –11); and

comparing said text data request and said pattern word sets with a retrieval module to identify a requested object identifier for locating a requested data object (comparing word to clip; column 5, lines 24-42).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. **Claims 9, 15, 29 and 35** are rejected under 35 U.S.C. 103(a) as being unpatentable over Greene in view of Gao et al. (PGPUB 2004/0111272), hereinafter referenced as Gao.

Regarding **claims 9 and 29**, Greene discloses a system for indexing electronic information, but does not specifically teach a system wherein said speech recognition engine performs speech recognition procedures upon said spoken data descriptions to produce said text data descriptions, said speech recognition engine being implemented as a large-vocabulary continuous speech recognizer that includes acoustic models, a dictionary, and a language model.

Gao discloses a language translation and display wherein said speech recognition engine performs speech recognition procedures upon said spoken data descriptions (column 3, paragraph 0042) to produce said text data descriptions (text words), said speech recognition engine being implemented as a large-vocabulary continuous speech recognizer that includes acoustic models (acoustic model; column 3,

paragraph 0032 with figure 1, element 110), a dictionary (figure 1, element 126), and a language model (figure 1, element 112), to transcribe spoken words to text.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Greene's system wherein said speech recognition engine performs speech recognition procedures upon said spoken data descriptions to produce said text data descriptions, said speech recognition engine being implemented as a large-vocabulary continuous speech recognizer that includes acoustic models, a dictionary, and a language model, as taught by Gao, for audibly producing the natural language sentence in a target language (column 3, paragraphs 0031-0032).

Regarding **claims 15 and 35**, Greene discloses a system for indexing electronic information, but does not specifically teach a system wherein said speech recognition engine performs speech recognition procedures upon said spoken data request to produce said text data request, said speech recognition engine being implemented as a large-vocabulary continuous speech recognizer that includes acoustic models, a dictionary, and a language model.

Gao discloses a language translation and display wherein said speech recognition engine (ASR) performs speech recognition procedures upon said spoken data request to produce said text data request (converting spoken words into text; column 3, paragraph 0032), said speech recognition engine being implemented as a large-vocabulary continuous speech recognizer that includes acoustic models (figure 1,

element 110), a dictionary (figure 1, element 126), and a language model (figure 1, element 112), to transcribe spoken words to text.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Greene's system wherein said speech recognition engine performs speech recognition procedures upon said spoken data request to produce said text data request, said speech recognition engine being implemented as a large-vocabulary continuous speech recognizer that includes acoustic models, a dictionary, and a language model, as taught by Gao, for audibly producing the natural language sentence in a target language (column 3, paragraphs 0031-0032).

8. **Claims 17-19 and 37-39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Greene in view of Furuyama et al. (USPN 6,611,803), hereinafter referenced as Furuyama.

Regarding **claims 17 and 37** Greene discloses a system for indexing electronic information, but does not specifically teach a system wherein said retrieval module performs said search procedure by utilizing pre-defined priority indicators or pre-defined relationship indicators.

Furuyama discloses a method for retrieving video and audio using indexed generated by speech recognition wherein said retrieval module performs said search procedure by utilizing pre-defined priority indicators (beginning/ending time) or pre-

defined relationship indicators (length; column 5, lines 4-60), to detect respective similarities.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Greene's system wherein said retrieval module performs said search procedure by utilizing pre-defined priority indicators or pre-defined relationship indicators, as taught by Furuyama, to detect respective similarities and generate video retrieval (column 5, lines 4-32).

Regarding **claims 18 and 38**, Greene discloses a system for indexing electronic information, but does not specifically teach a system wherein said pre-defined priority indicators are used to evaluate search terms from said text data request based upon corresponding word lengths.

Furuyama discloses a method for retrieving video and audio using indexed generated by speech recognition wherein said pre-defined priority indicators are used to evaluate search terms from said text data request based upon corresponding word lengths (length; column 5, lines 46-60), to detect respective similarities.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Greene's system wherein said pre-defined priority indicators are used to evaluate search terms from said text data request based upon corresponding word lengths, as taught by Furuyama, to detect respective similarities and generate video retrieval; column 5, lines 4-32).

Regarding **claims 19 and 39**, Greene discloses a system for indexing electronic information, but does not specifically teach a system wherein said pre-defined

relationship indicators are utilized to evaluate search terms from said text data request depending one whether said search terms are located at the beginning or the end of said text data request.

Furuyama discloses a method for retrieving video and audio using indexed generated by speech recognition wherein said pre-defined relationship indicators are utilized to evaluate search terms from said text data request depending one whether said search terms are located at the beginning or the end of said text data request (beginning/ending time; column 5, lines 4-32), to detect respective similarities.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Greene's system wherein said pre-defined relationship indicators are utilized to evaluate search terms from said text data request depending one whether said search terms are located at the beginning or the end of said text data request, as taught by Furuyama, to detect respective similarities and generate video retrieval; column 5, lines 4-32).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Anderson (USPN 6,499,016) discloses automatically storing and presenting digital images using a speech-based command language.
- Lux (PGPUB 2005/0137843) discloses a method and apparatus for authoring documents using object-based elements as an interaction interface.

- Gupta et al. (PGPUB 2005/0081159) disclose a user interface for creating viewing and temporally positioning annotations for media content.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jakieda R. Jackson whose telephone number is 571.272.7619. The examiner can normally be reached on Monday through Friday from 7:30 a.m. to 5:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571.272.7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JRJ
May 8, 2006

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